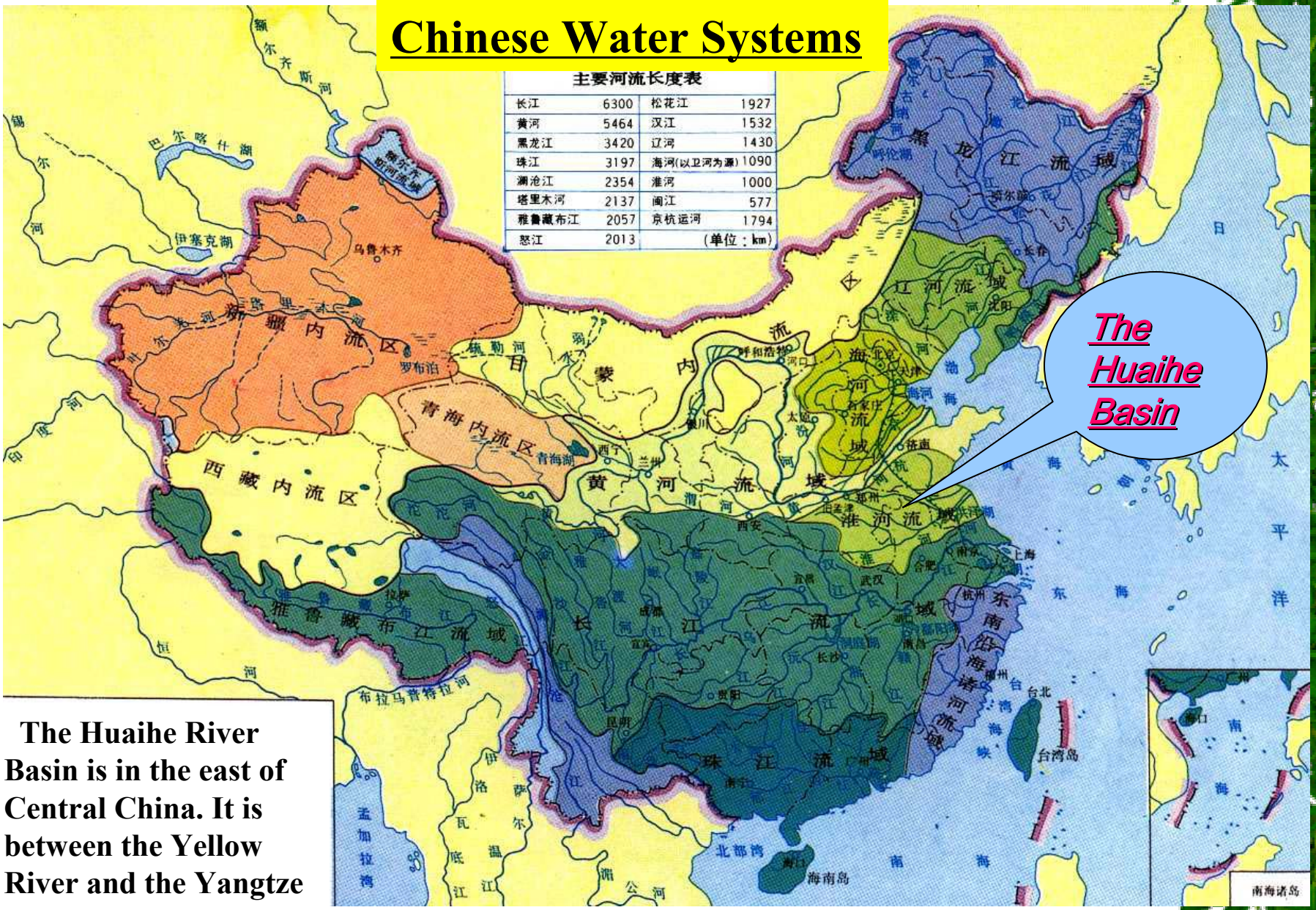
The analysis of climatic causes of anomalous precipitation in Huaihe Basin during the summer of 2003

NATIONAL CLIMATE CENTER

- The average dekadly rainfall;
- The SCS China Sea Summer Monsoon;
- The Subtropical High In Northwest Pacific;
- Circulation and the Blocking High in the middle –high Latitude .

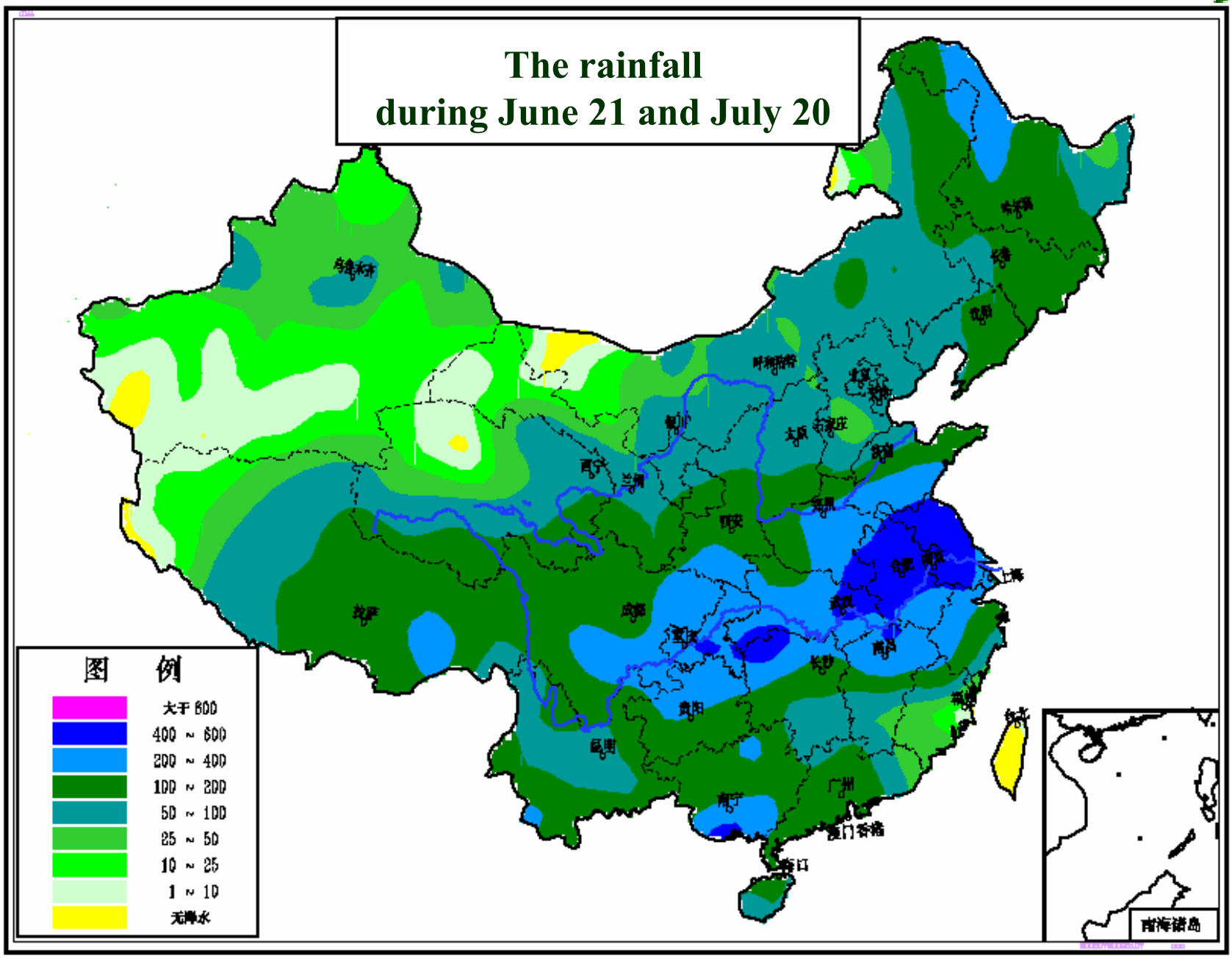
Chinese Water Systems



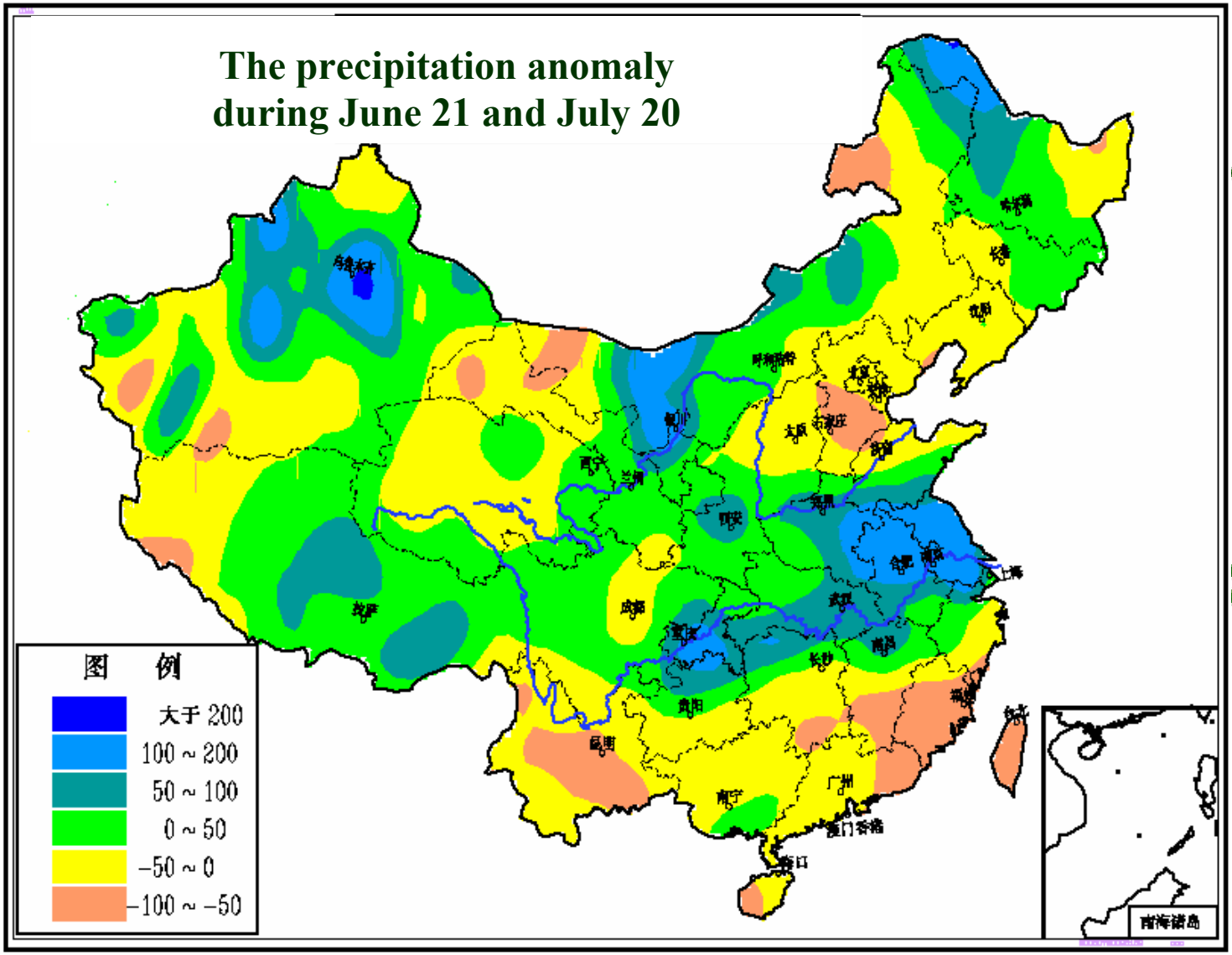
The Huaihe River Basin is in the east of Central China. It is between the Yellow River and the Yangtze River.

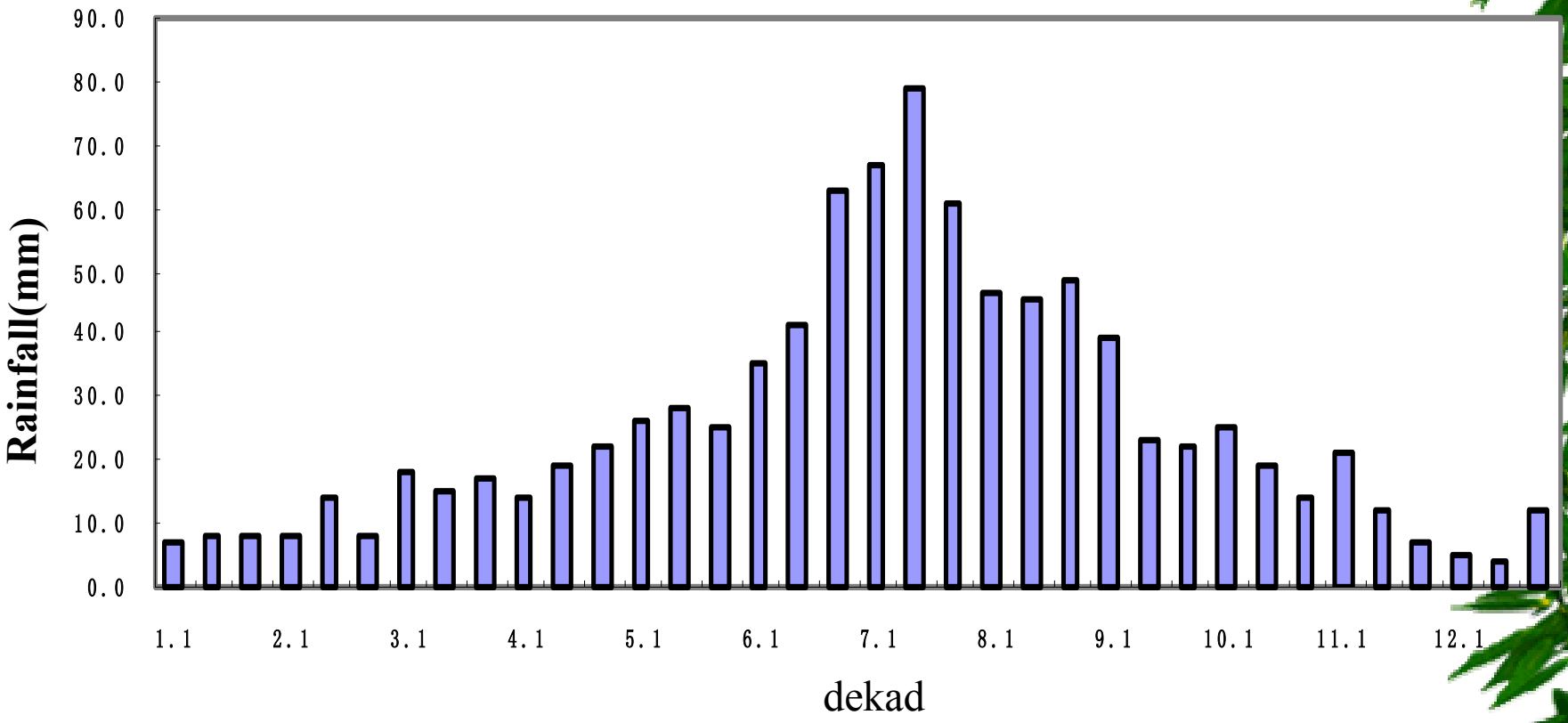
The flood fatality in Huaihe Basin during the summer of 2003

The rainfall during June 21 and July 20

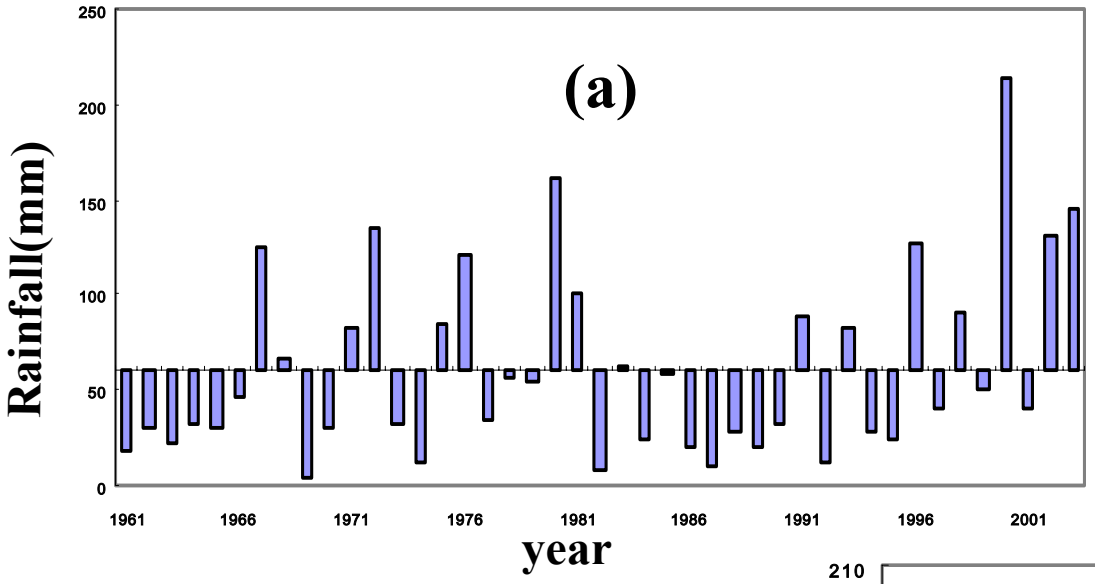


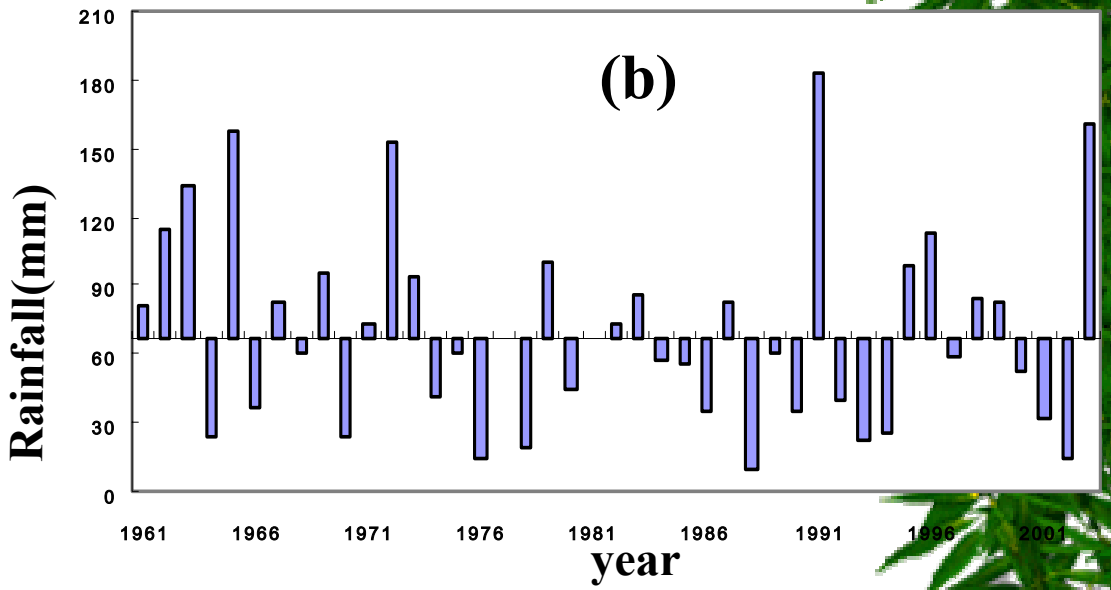
The precipitation anomaly during June 21 and July 20





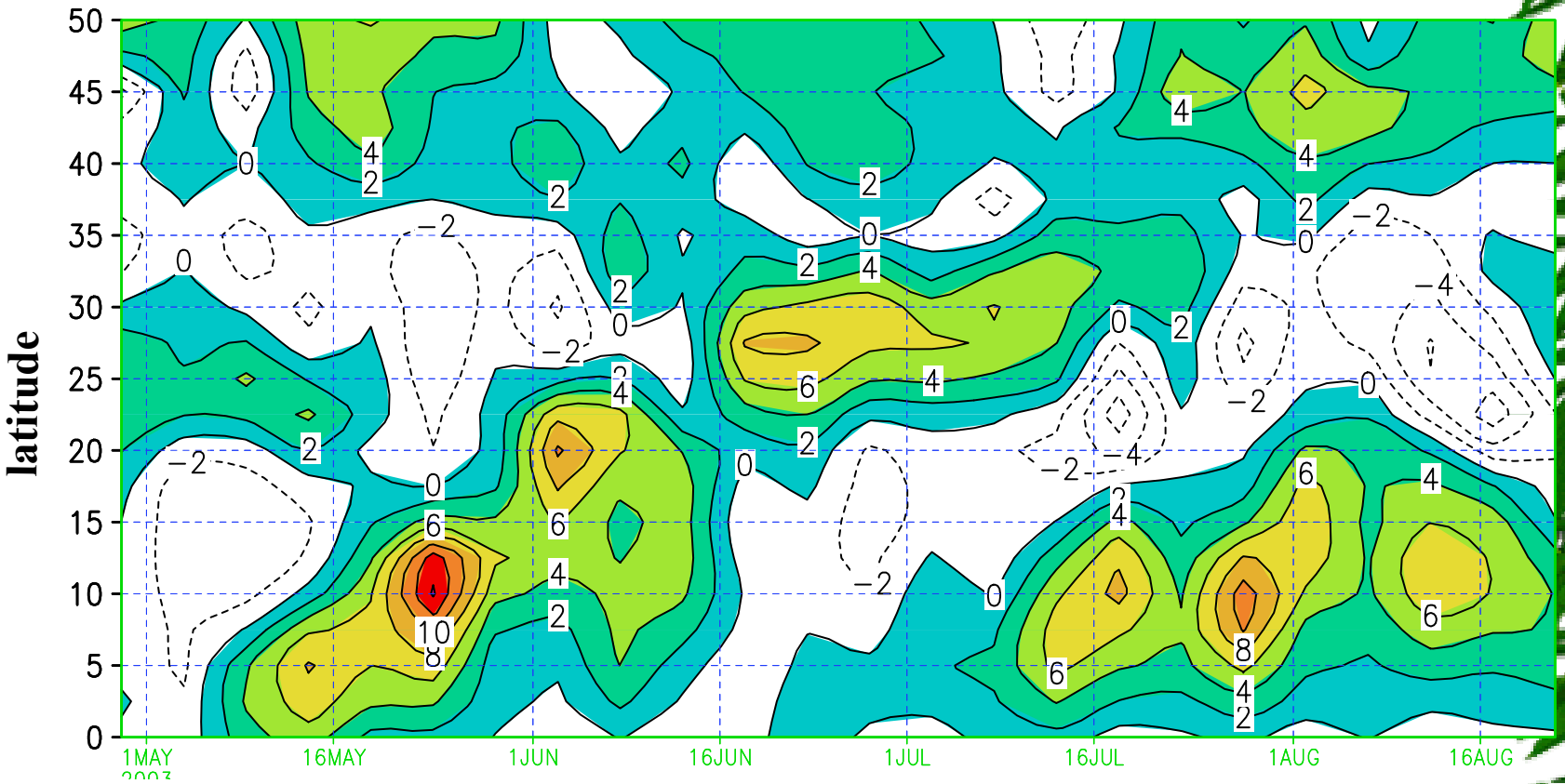
The average dekadly rainfall in the Huaihe Basin (1971-2000)





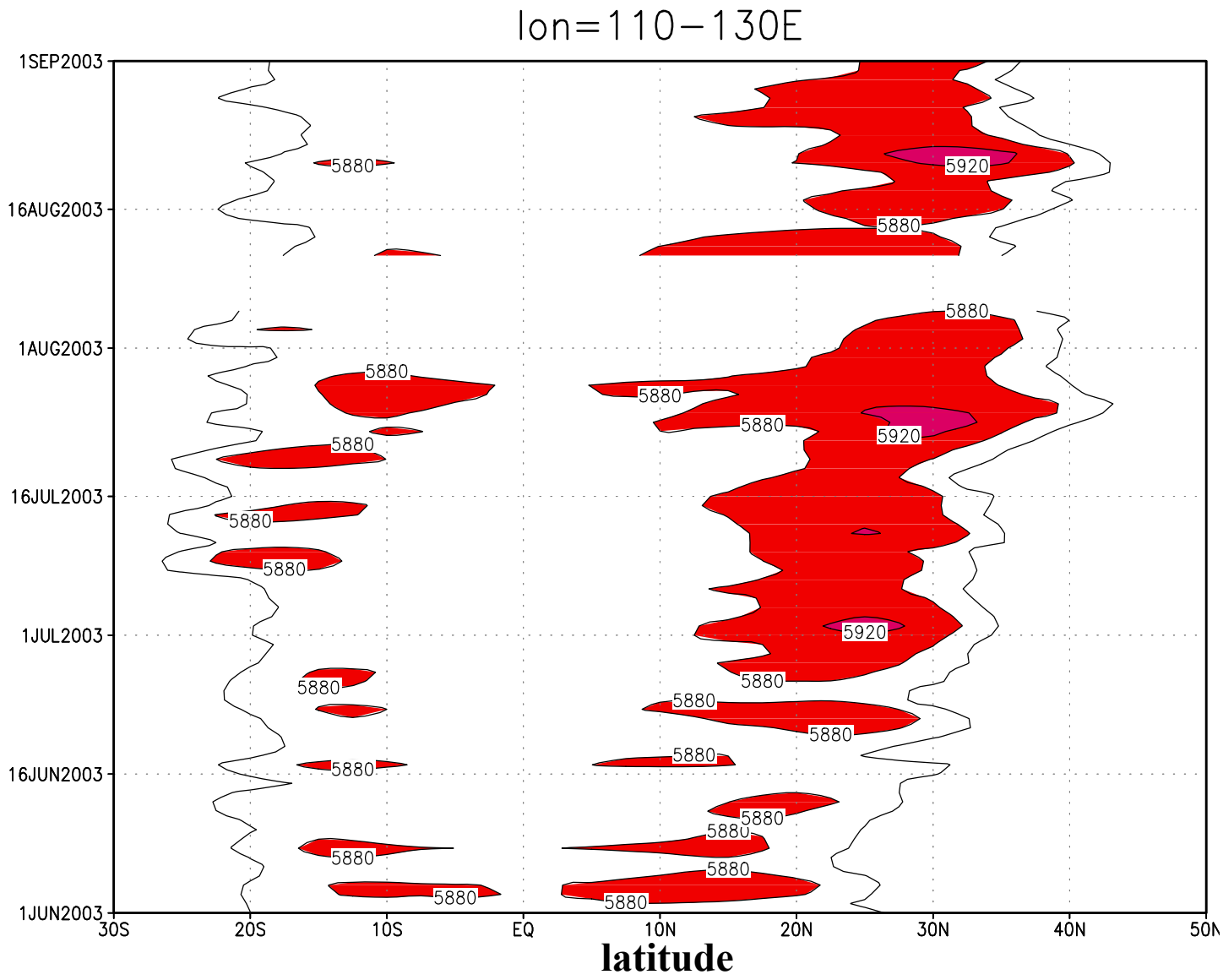
The year-by-year dekadly rainfall in the last dekad of June(a) and the first dekad of July(b) from 1961 to 2003

The influence of South China Sea summer monsoon to the summer rainfall of China

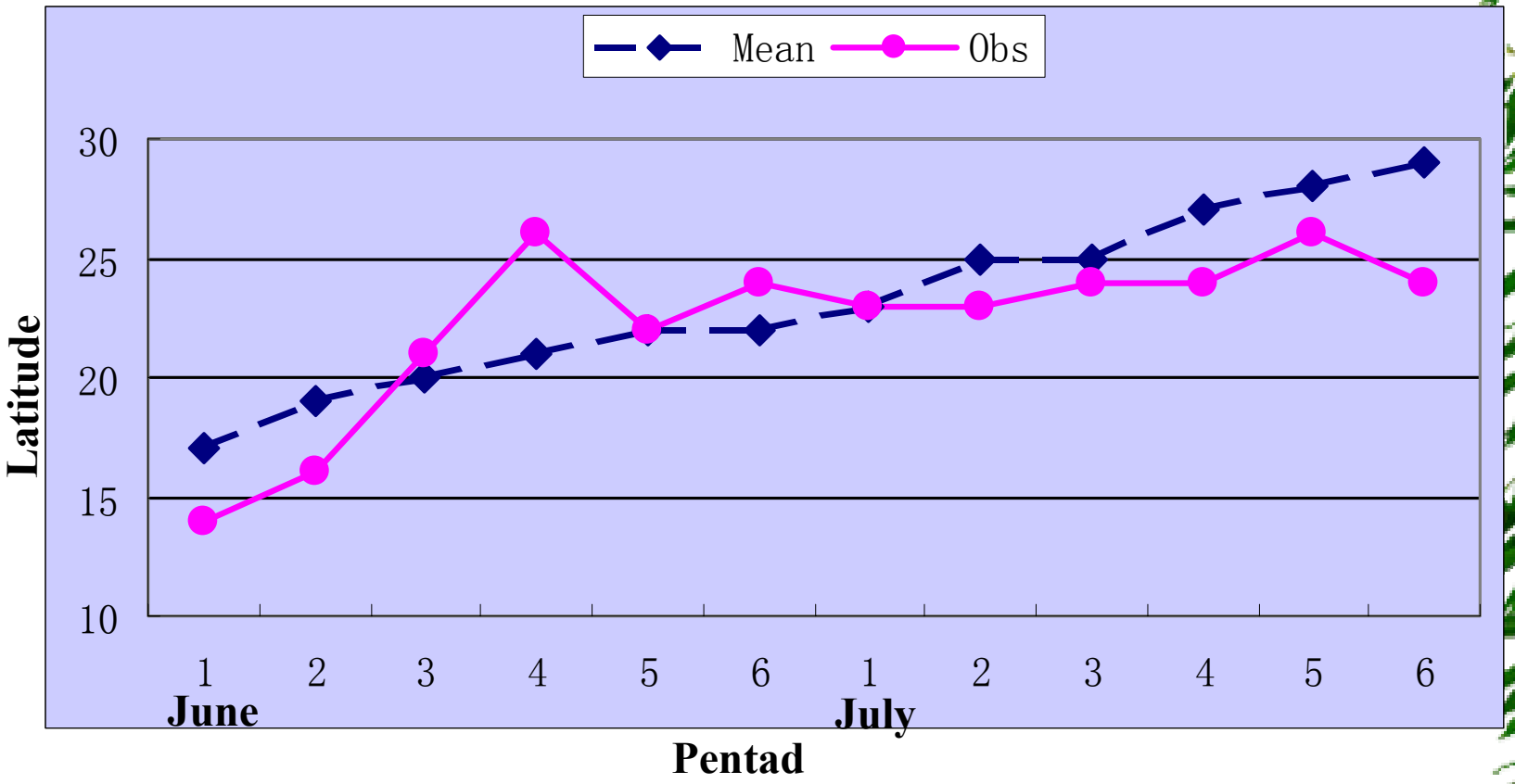


time-latitude cross section of mean
(110-120° E) zonal wind (Unit: m/s, May 1 to Agu. 31)

The Characteristics Of The Subtropical High In Northwest Pacific



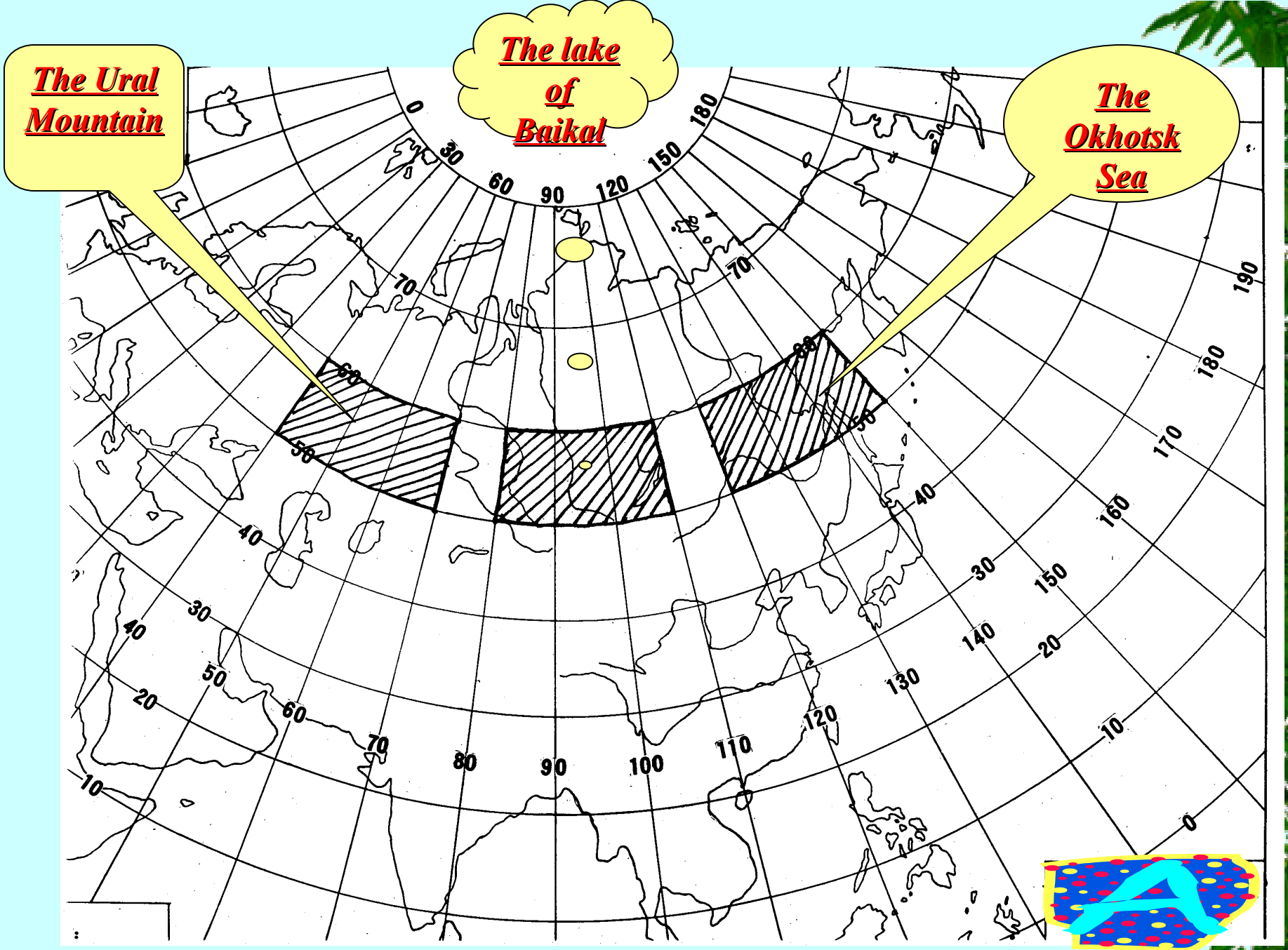
Time-latitude cross section of mean(110-130 ° E) geopotential height on 500hPa from June 1 to August 31

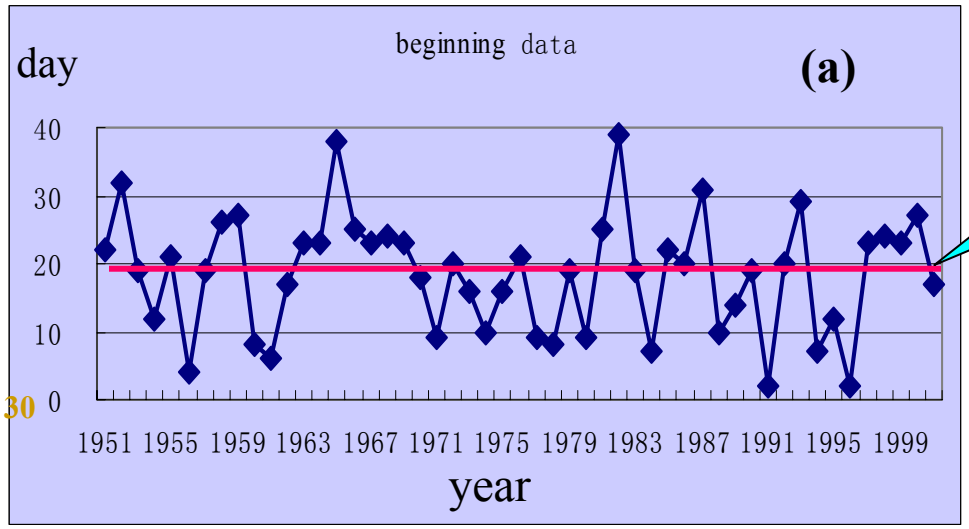


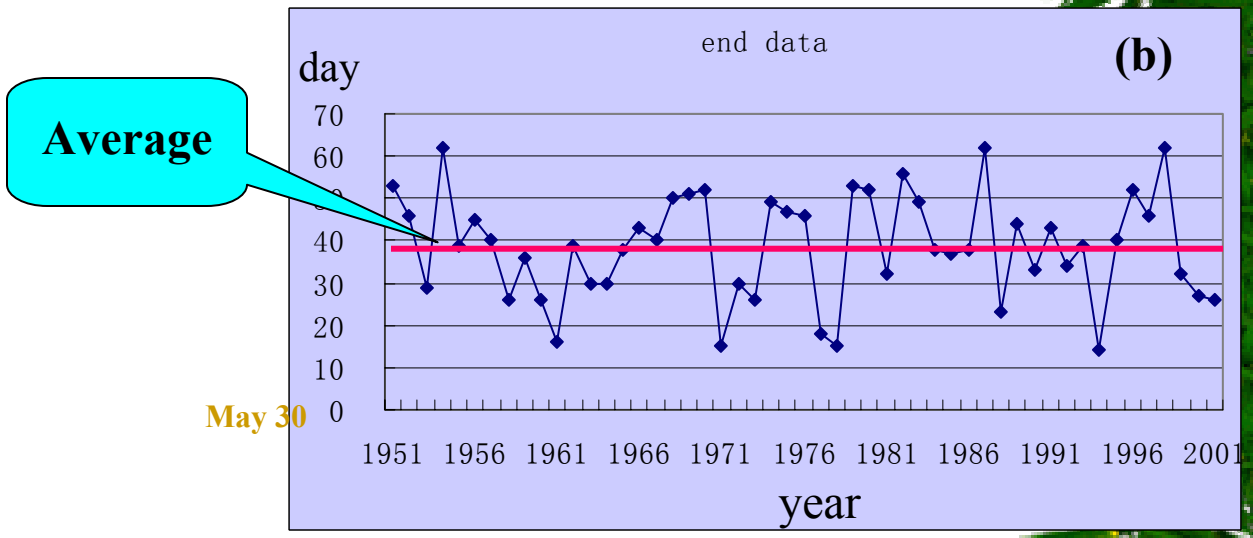
the pentadly ridge line of subtropical high from June to July

Circulation and the blocking

high in the middle –high latitudes

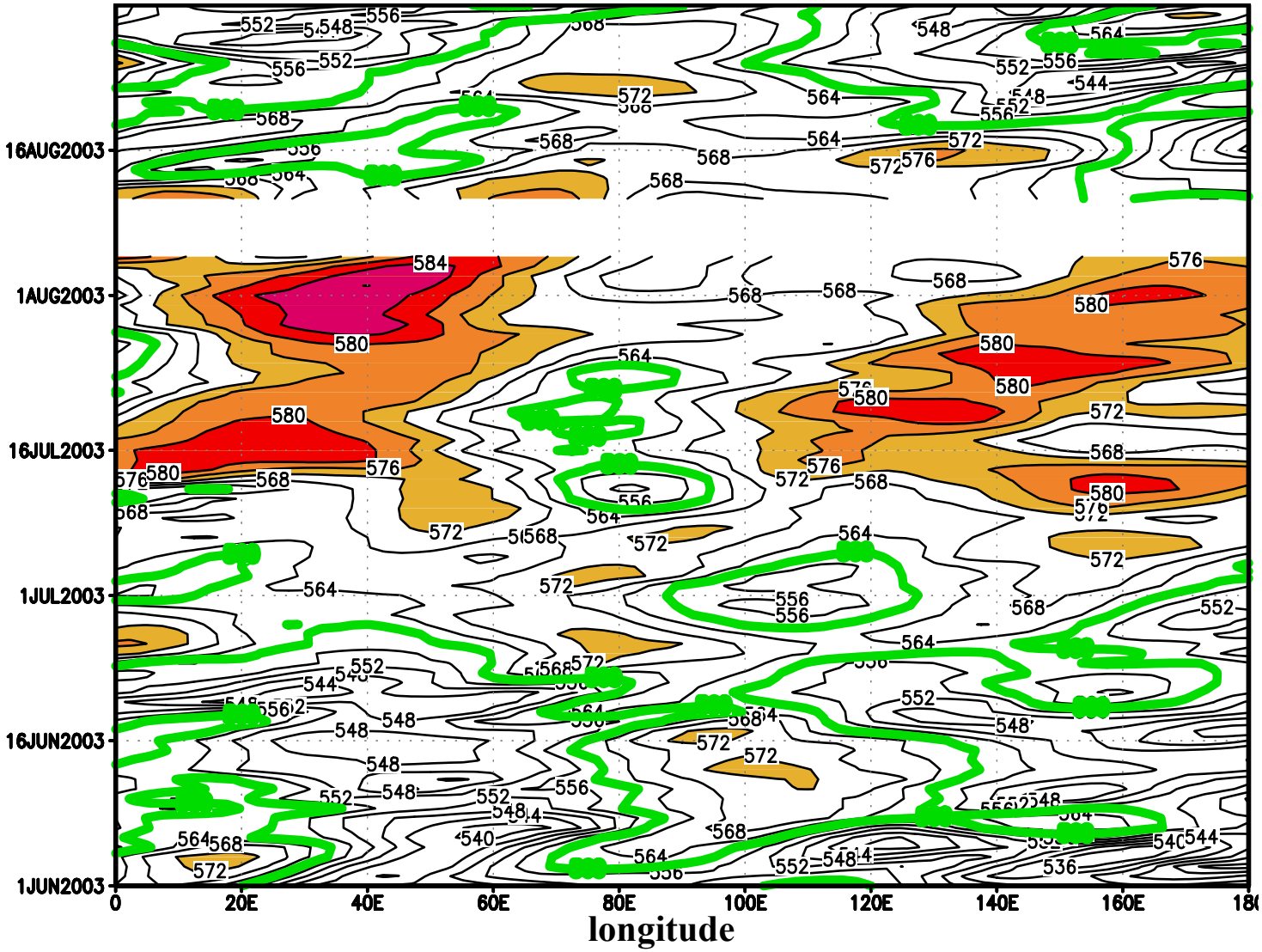

The Ural Mountain
The lake of Baikal
The Okhotsk Sea



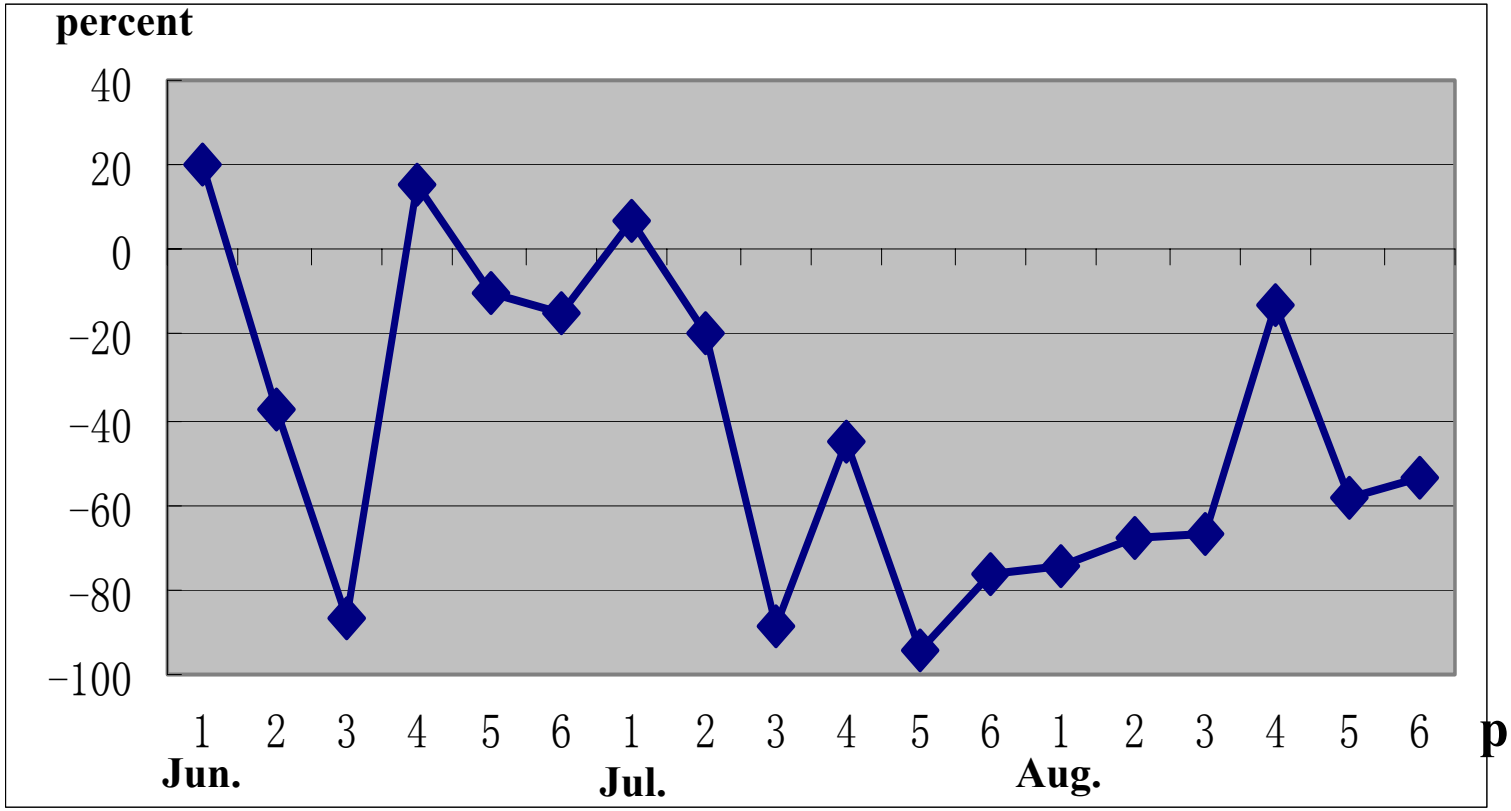


The data of beginning of Mei-yu period(a)

and end of the Mei-yu period(b)



longitude-time cross section of mean(55～65° N) geopotential height on 500hPa from June 1 to August 31.



Westerly circulation index of Pentad from June to August in Asia

Thank You!